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10/728,017	12/04/2003	Eric Lawrence Barsness	ROC920030312US1	7311

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EXAMINER
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/728,017	BARSNESS ET AL.
	Examiner	**Art Unit**	
	MARY STEELMAN	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 June 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2 and 4-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,2 and 4-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04 December 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This Office Action is in response to Amendments and Remarks received 06/05/2007.

Per Applicant's request, claims 1, 2, 8, 9, 13, and 17 are amended. Claim 3 is previously

cancelled. Claims 1, 2, and 4-20 are pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claims 8-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter.

Claim 8 recites, "An apparatus comprising: means for..." The Specification, page 7, line 22,

discloses that the means may be implemented using any suitable hardware and / or software...

As such, a software embodiment is disclosed, which is a non-statutory embodiment of 'software

per se.'

3.   In view of Applicant's comments, Examiner will interpret claim 1 as 'creating a method',

but not actually inserting that method into an application, and adding a first invocation of the

method (adding a call), at the paste location in the application (but the method will never be

invoked because it has not actually been added as a part of the application). There seems to be

no use for the determination that the block of code has a size greater than a threshold. There seems to be no use of 'the operation'.

112 Rejections

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 8, 13, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are:

What is done with the received operation? What is the purpose of receiving the operation?

What is done with the determination that the block of code has a size greater than a threshold? The determination is for what purpose?

Claim language could be improved by reciting (and similarly in all other independent claims):

A method comprising:

receiving an operation, a selection of a block of code in an application, and a selection of a paste location in the application;

for said selected block of code having a size greater than a threshold;

creating a method that comprises said block of code, using the received operation; and

adding a first invocation of said created method at the paste location.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the

invention.

Claim 2 recites the limitation "the block of code at a copy location in the application" in

line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the

invention. It is unclear as to whether "replacing the block of code" refers to the previous line, "a

method that comprises the block of code", or does it reference "a selection of a block of code in

an application?" In consideration of Applicant's comments on page 11 (item 13), claim 8 should

be amended to recite "means for replacing the selection of the block of code in the application

with a first invocation..."

Claim 13 suffers from the same indefiniteness. In consideration of Applicant's

comments on page 12 (item 17) claim limitation should be amended to recite "replacing the

selection of the block of code in the application with a first invocation of the method...", thereby

not confusing it with the created "method that comprises the block of code."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 2, 4-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

Patent 7,110,936 B2 to Hiew et al., in view of 2002 / 0032804 A1 Hunt.

Per claim 1:

A method comprising:

receiving an operation, a selection of a block of code in an application, and a selection of a paste

location in the application;

determining that the block of code has a size greater than a threshold;

creating a method that comprises the block of code; and

adding a first invocation of the method at the paste location.

Hiew: Col. 7: 3-22, editor 80 (receiving an operation), individual procedures and data blocks as

active elements 82 (a selection of code), selecting active elements, to cut, copy or move code

segment... Col. 8: 43-50, site manager 70 and document manager 60 interact to effectuate the

transfer of code between the remote server computers 22a and the local computer 22b...modules

could be combined or further divided to form one single module or additional modules   Col. 10:

3-4, statistics - max   Col. 14: 63 – col. 15: 1, The site manager 70, the document manager 60,

and the editor 80 work in conjunction with one another to execute the code...site manager 70

manages the connections...document manager 60 tracks the associations between the code

(invocations)   Col. 15: 65-66, visualizer window 121 and represent the procedures (method

block of code) and data blocks as program flow icons 126.   Col. 16: 31-35, allows changes to

the code to be made...by using the editor...

Hiew disclosed redirecting code, but failed to explicitly disclose adding a first invocation.

However, Hunt disclosed:

[0265] To apply inline redirection, the COIGN runtime, a collection of DLLs, is loaded into the

application's address space before the application executes. One of these DLLs, the COIGN run-

time executive (RTE), inserts the inline redirection code.   [0263] Referring to FIG. 14, at load

time, the first few instructions 502 of the target function 500 are replaced with a jump instruction

504 to the instrumentation detour function 506 in the instrumentation. The first few

instructions 502 are normally part of the function prolog generated by a compiler and not the

targets of any branches. The replaced instructions 502 are used to create a trampoline function

508. When the modified target function 501 is invoked, the jump instruction 504 transfers

execution to the detour function 506 in the instrumentation. The detour function 506 passes

control to the remainder of the target function by invoking the trampoline function 508. After

the moved instructions 502 are executed in the trampoline 508, a jump instruction 510 transfers

execution back to a spot in the target function 501. The trampoline function 508 allows the

detour function 506 to invoke the target function without interception.

Therefore, it would have been obvious, to one of ordinary skill in the art, to modify Hiew, using

the teachings of Hunt, because Hiew recognized the need for (col. 1: 64-65) an Integrated

Development Environment for generating and maintaining software code. Likewise Hunt

recognized the benefit of [0014-0015] modifying an application, packaging it differently to

optimize distribution and execution.

Per claim 2.

-replacing the block of code at a copy location in the application with a second invocation of the

method.

Hiew: Col. 8: 43-50, site manager 70 and document manager 60 all preferably interact with one

another to effectuate the transfer of code between the remote server computers 22a and the local

computer 22b. It should also be understood that each of these modules could be combined or

further divided to form one single module or additional modules.

Per claim 4:

-displaying user interface options based on whether the operation is to be performed within a

single part and class.

Hiew: Col. 10: 22-28, activation of the integrate software application 30...the graphical user interface 40 will be displayed and the user will have the opportunity to open modules...or engage functions represented by buttons (user interface options)... Col. 8: 43-50, site manager 70 and document manager 60 all preferably interact with one another to effectuate the transfer of code between the remote server computers 22a and the local computer 22b. It should also be understood that each of these modules could be combined or further divided to form one single module or additional modules (within a single part and class).

Per claim 5:

-displaying user interface options based on whether the operation is to be performed between two parts in a single package.

Hiew: Fig. 11 & Col. 10: 33-43, displays the defined / available remote computers 22a...displays a server profile for a selected remote computer 22a, comprising connection information... Col. 11: 49-50, The user may then select one or more of the available files for editing or visualizing.

Per claim 6:

-the operation comprises a copy-and-paste operation.

Hiew: Col. 11: 61, copying...pasting information

Per claim 7:

-the operation comprises a punch-out operation.

Hiew: Col. 11: 61, cutting (punch-out)...

Per claim 8:

An apparatus comprising:

means for receiving a copy-and-paste operation, a selection of a block of code in an application,

and a selection of a paste location in the application;

means for determining that the block of code has a size greater than a threshold;

means for creating a method that comprises the block of code; and

means for replacing the block of code with a first invocation of the method.

Hiew: See limitations addressed in claim 1. Col. 11: 39 – col. 12: 36, local computer accesses a

remote computer...document manager window may be displayed to the user...displays the

available files for the respective computers...The user may then select one or more of the

available files for editing...perform various Windows command, such as, creating new

files...deleting...copying, cutting, and pasting...To open and edit a file displayed...drag a

selected file from the remote panel...the file transfer program may communicate with the remote

computer via the connectivity layer and instruct the remote computer to send the selected file ...

Col. 13: 44-45, selected code is displayed on the editor window 82 the user can begin to edit the

code Col. 13: 56-65, editor 80 works in connection with the parser layer 140...display a tree

view 90 comprised of active elements 92 that are representative of code section that perform

important functions...clicking on the desired active element 92, which causes the code that

corresponds with that active element to be displayed in the code view panel 82b.

Hiew disclosed redirecting code, but failed to explicitly disclose adding a first invocation.

However, Hunt disclosed:

[0265] To apply inline redirection, the COIGN runtime, a collection of DLLs, is loaded into the

application's address space before the application executes. One of these DLLs, the COIGN run-

time executive (RTE), inserts the inline redirection code.   [0263] Referring to FIG. 14, at load

time, the first few instructions 502 of the target function 500 are replaced with a jump instruction

504 to the instrumentation detour function 506 in the instrumentation. The first few

instructions 502 are normally part of the function prolog generated by a compiler and not the

targets of any branches. The replaced instructions 502 are used to create a trampoline function

508. When the modified target function 501 is invoked, the jump instruction 504 transfers

execution to the detour function 506 in the instrumentation. The detour function 506 passes

control to the remainder of the target function by invoking the trampoline function 508. After

the moved instructions 502 are executed in the trampoline 508, a jump instruction 510 transfers

execution back to a spot in the target function 501. The trampoline function 508 allows the

detour function 506 to invoke the target function without interception.

Therefore, it would have been obvious, to one of ordinary skill in the art, to modify Hiew, using the teachings of Hunt, because Hiew recognized the need for (col. 1: 64-65) an Integrated Development Environment for generating and maintaining software code. Likewise Hunt recognized the benefit of [0014-0015] modifying an application, packaging it differently to optimize distribution and execution.

Per claim 9:

-means for adding a second invocation of the method at the paste location.

Hiew: Col. 14: 46-48, user can associate links or URLs with the template during creation (at paste location, link to URL

Per claim 10:

-means for selecting user interface options to present based on whether the copy-and-paste operation is within a single part and class.

See rejection of limitations addressed in claim 4 above.

Per claim 11:

-means for selecting user interface options to present based on whether the copy-and-paste

operation is between two parts in a single package.

See rejection of limitations addressed in claim 5 above.

Per claim 12:

-means for selecting user interface options to present based on the copy-and-paste

operation being between two parts in two different packages.

See rejection of limitations addressed in claim 5 above. Furthermore, Hiew (col. 11: 49-50):

User may then select one or more of the available files for editing...

Per claim 13:

A storage medium encoded with instructions, wherein the instructions when executed comprise:

receiving a copy-and-paste operation, a selection of a block of code in an application, and a

selection of a paste location in the application;

determining that the block of code has a size greater than a threshold;

creating a method that comprises the block of code;

replacing the block of code with a first invocation of the method; and

adding a second invocation of the method at the paste location.

See rejection of limitations addressed in claims 8 & 9 above.

Per claim 14:

-selecting user interface options to present based on whether the copy-and-paste operation is within a single part and class.

See rejection of limitations addressed in claim 4 above.

Per claim 15:

-selecting user interface options to present based on whether the copy-and-paste operation is between two parts in a single package.

See rejection of limitations addressed in claim 5 above.

Per claim 16:

-selecting user interface options to present based on the copy-and-paste operation being between two parts in two different packages.

See rejection of limitations addressed in claim 12 above.

Per claim 17:

An electronic device comprising:

a processor; and a storage device encoded with instructions, wherein the instructions when executed on the processor comprise:

receiving a copy-and-paste operation, a selection of a block of code at a copy location in the application, and a selection of a paste location in the application;

determining that the block of code has a size greater than a threshold;

creating a method that comprises the block of code;

replacing the block of code at the copy location with a first invocation of the method;

adding a second invocation of the method at the paste location;

determining that the block of code is to return a plurality of values; and

creating a helper class for the method, wherein the helper class returns the plurality of values.

See rejection of limitations addressed in claims 1 & 8 above. Additionally, Hiew disclosed (col. 17: 14-16, 43-45) external files, library or macros that are referenced by the code capable of parsing and interpreting other file types such as SPSS, SQL, DB2, UDB, Oracle RDBMS, etc. (helper classes / return plurality of values)

Per claim 18:

-selecting a user interface default option to present based on whether the copy-and-paste operation is between two parts in a single package.

See rejection of limitations addressed in claim 5 above.

Per claim 19:

-designating a create private method option as a user interface default option if the

copy-and-paste operation requested that the block of code be copied within a single part.

See rejection of limitations addressed in claim 4 above. Additionally, access modifiers, such as

private, public, are well known in the art. Hiew disclosed a JAVA virtual machine (FIG. 2) ,

known to be object oriented, (col. 5: 34) routines, programs, objects, components, and/or data

structures that perform particular tasks, (col. 11: 58-63) provided user interface default options.

Col. 7: 15-22, The editor 80, the document manager 60 and the site manager 70 cooperate to

track the association between edited code...The editor 80 may also employ language specific

syntax checking (public / private access) and auto correct functions to enhance the software

development capability of the integrated software application 30.

Per claim 20:

-selecting a user interface default option to present based on the copy-and-paste operation being

between two parts in two different packages.

See rejection of limitations addressed in claim 12 above.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (571) 272-3704. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached at (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned: 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman   **MARY STEELMAN**
                        PRIMARY EXAMINER

08/23/2007